



Analysis Method Teaching Teacher Physical Education Based Game Traditional Enjang - Enjang

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Abstract

This study aims to analyze the teaching method of physical education, sports, and health (PJOK) based on the traditional game of enjang-enjang. The background of this study departs from the need for a contextual, fun, and local wisdom-based learning approach in accordance with the demands of the Independent Curriculum. Traditional games are seen as having educational and character values that can enrich students' learning experiences. This study used a descriptive qualitative approach with a case study design. Data were collected through participatory observation, in-depth interviews with teachers and students, and documentation. The results showed that the enjang - enjang -based teaching method was able to increase learning motivation, active involvement, and the formation of student character such as sportsmanship, responsibility, and cooperation. Teachers designed and implemented learning regularly by integrating local cultural values into the lesson plan (RPP). Supporting factors for the success of this method include school support, student enthusiasm, and teacher readiness. Meanwhile, obstacles faced included limited learning time, unpredictable weather, and students' unfamiliarity with the game rules. However, teachers were able to overcome these obstacles through adaptive strategies. These findings indicate that the integration of traditional games into physical education (PJOK) learning is not only curricularly relevant but also effective in shaping students' character, contextualization, and appreciation for local culture.

Password s: Analysis, Teaching Methods, Traditional Games

How to Cite: Rusdiana Yusuf, I Wayan Lasmawan, I Gusti Putu Suharta, & I Wayan Widiana. (2025). Analysis of Teacher Teaching Methods Based on Game Traditional Enjang- Enjang. *Journal of Media, Sciences, and Education*, 4 (2), 76–83. <https://doi.org/10.36312/jomet.v4i2.123>



<https://doi.org/10.36312/jomet.v3i4.123>

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Introduction

Physical Education, Sport, and Health (PJOK) is a vital component of the national education system aimed at developing the physical, mental, social, and emotional aspects of students in a balanced way (Depdiknas, 2007). In this context, teaching physical education is not merely focused on students' motor skill achievement but also emphasizes character formation, social skill development, and the internalization of cultural values (Hastie et al., 2011; Dyson et al., 2004). Along with the implementation of the Independent Curriculum, which prioritizes contextual and differentiated learning, there emerges a need for teaching methods that are more creative, relevant, and applicable to students' real-life experiences (Ministry of Education, Culture, Research and Technology, 2022).

One promising approach to achieve this goal is the integration of traditional games into physical education learning. Traditional games are an inheritance of local culture and contain valuable educational, social, and moral lessons. For instance, games such as Longan or Engklek are well-known as community games that train students' balance, concentration, agility, honesty, and teamwork (Nurhidayah et al., 2021). These games are not only enjoyable but also provide effective practice for psychomotor skills in a natural and engaging way (Sugiarto & Hasan, 2020). Unfortunately, the frequency of traditional games played by the younger generation has declined due to modernization and the dominance of digital games (Afifah et al., 2025).

Integrating traditional games into PJOK learning can serve as an alternative solution to create active, collaborative, and fun learning experiences. Experiential learning theory

suggests that students learn more effectively when they are directly involved in activities that allow them to experience concepts firsthand (Camacho-Sánchez et al., 2023; Gil-Arias et al., 2017). Traditional games provide opportunities for students to actively engage, which increases their motivation and engagement in physical education (Suryadi et al., 2025). Moreover, participation in these activities supports the development of soft skills such as equality, sportsmanship, leadership, and responsibility (Casey & Goodyear, 2015; Fernández-Río et al., 2017).

The use of traditional games in teaching also aligns with the principles of contextual learning and local wisdom values, which are emphasized in the Independent Curriculum (Ministry of Education, Culture, Research and Technology, 2022). Through this approach, teachers have the autonomy to design learning activities that are relevant to the students' environment and cultural background, making the learning process more meaningful and impactful (Harvey & Jarrett, 2014; Bessa et al., 2019). Teachers play a critical role in designing, organizing, and evaluating learning processes based on local games, ensuring that both physical and social learning objectives are met (Hastie et al., 2011; Méndez-Giménez et al., 2015).

Despite these benefits, the systematic use of traditional games as a teaching method in physical education remains limited. Several constraints contribute to this issue, including limited documentation of traditional games, insufficient teacher training, and the absence of standardized teaching modules (Prasetyo & Hidayat, 2021; Retos, 2025). Additionally, traditional games are often perceived as less academic or not aligned with the demands of modern curricula, which further reduces their integration into formal learning (Wardhani et al., 2025).

The reality of these challenges demonstrates the need to conduct a comprehensive analysis of teaching methods for physical education based on traditional games, especially in schools that emphasize character and Islamic values. Research in this area can provide insights into how games like Longan or Engklek are implemented, their effectiveness, and the challenges teachers face during the learning process (Rumaeso et al., 2024). Furthermore, this study can contribute to the development of inclusive, creative, and contextual learning practices in physical education.

Exploration of good practices in the field can serve as a foundation for compiling guidelines for teaching physical education based on traditional games that are applicable and appropriate for student needs (Prayogi et al., 2024; Afifah et al., 2025). Additionally, examining students' perceptions of PJOK learning with a traditional game-based approach can reveal important information about affective and social aspects. Traditional games have strong potential in creating supportive and collaborative classroom climates, which positively influence students' well-being (Sari & Suharjo, 2018; Velawati, 2020).

The effectiveness of this method should be assessed not only through physical aspects but also through students' affective and cognitive development, providing a comprehensive understanding of learning outcomes (Miller et al., 2016; Camacho-Sánchez et al., 2023). Another practical benefit of using traditional games is that they require minimal equipment and can be played in available open spaces in schools (Kurniasih, 2020; Wiyarko & Adhi, 2025). This makes the method efficient, cost-effective, and accessible for schools with limited resources while still achieving learning objectives.

In addition to pedagogical advantages, traditional games also contribute to cultural preservation. By incorporating these games into PJOK learning, students are introduced to local culture, fostering appreciation and love for their cultural heritage (Lavega-Burgués et al., 2014). This integration ensures a holistic educational process that covers cognitive, psychomotor, affective, and cultural dimensions, in line with the national educational spirit that emphasizes knowledge transfer as well as character and identity formation (Hastie et al., 2011; Belmekki, 2023).

Based on this rationale, it is highly relevant to conduct research analyzing physical education teaching methods based on traditional games, specifically the Enjang-Enjang game. This study is expected to contribute to the development of PJOK learning models that are culturally grounded, educationally valuable, and aligned with current curriculum demands. By exploring implementation practices, challenges, and students' responses, the study can inform better strategies for integrating traditional games into modern physical education. This approach ensures not only physical development but also the formation of character, social skills, and cultural awareness in students, thereby fulfilling the holistic goals of national education.

Method Study

This study employed a qualitative descriptive approach to gain a deep understanding of the phenomenon of physical education teaching methods based on traditional games, specifically the Longan game, as implemented by teachers. The study also examined students' responses and experiences during the learning process (Hastie et al., 2011; Méndez-Giménez et al., 2015). Unlike quantitative studies that focus on numerical measurement, the qualitative approach emphasizes understanding the meaning, processes, and experiences of participants within a contextual and culturally grounded learning environment (Camacho-Sánchez et al., 2023; Suryadi et al., 2025).

The qualitative approach was chosen because this research focuses on exploring teaching and learning practices, student engagement, and experiential learning outcomes rather than statistical comparisons. This approach allows researchers to uncover subtle dynamics in the classroom, such as the interaction between teachers and students, students' emotional and social responses, and the ways in which traditional games contribute to psychomotor development (Afifah et al., 2025; Gil-Arias et al., 2017). In particular, traditional games like Longan provide hands-on opportunities for students to practice motor skills, teamwork, concentration, and decision-making, which are critical for holistic physical education (Sugiarto & Hasan, 2020).

This study employed a case study design. Case studies are particularly suitable for research that focuses on a single location and a specific phenomenon, allowing an in-depth examination of the context, processes, and outcomes of teaching methods (Wardhani et al., 2025; Rumaeso et al., 2024). In this study, the case is the implementation of the Longan game in PJOK learning at a particular school. A case study enables the collection of detailed descriptive data, capturing real-life practices, challenges, and innovative teaching strategies that cannot be fully understood through surveys or experiments (Prayogi et al., 2024; Retos, 2025).

Data collection in this study involved multiple sources to ensure triangulation and validity. Classroom observations were conducted to examine how the teacher implemented the Longan game, including instructional strategies, classroom management, and student participation. Interviews were held with both the PJOK teacher and students to gain insight into their perceptions, experiences, and learning outcomes (Sugiarto & Hasan, 2020; Rumaeso et al., 2024). Additionally, document analysis of lesson plans, student assignments, and activity reports was performed to complement observational and interview data (Hastie et al., 2011; Camacho-Sánchez et al., 2023).

The qualitative descriptive case study also allowed for the examination of the affective, social, and cognitive dimensions of student learning. Participation in traditional games was observed to enhance social skills, leadership, cooperation, and sportsmanship, as well as motivation and engagement in physical education (Sari & Suharjo, 2018; Velawati, 2020). Furthermore, this approach provided a way to explore how the teaching method contributes to cultural preservation, since traditional games like Longan carry local values,

norms, and educational principles (Lavega-Burgués et al., 2014; Gil-Arias et al., 2017).

In conclusion, using a qualitative descriptive case study is particularly appropriate for this research because it enables an in-depth exploration of the implementation of traditional game-based teaching methods in PJOK. It allows researchers to understand the practical application, student experiences, challenges, and benefits of integrating culturally relevant games into physical education. This approach aligns with the goals of the Independent Curriculum, which emphasizes contextual learning, cultural relevance, and holistic student development (Ministry of Education, Culture, Research and Technology, 2022; Afifah et al., 2025).

Results and Discussion

Description of data in study This arranged in a way systematic based on results collection of field data obtained through three technique main , namely observation participatory , interview in-depth , and documentation . Third technique This used in a way integrated For get description comprehensive about practice integrated PJOK learning game traditional jang-engjang . Data collected in a way gradually and repeat For ensure depth information as well as accuracy in taking meaning from observed phenomena .

Focus main analysis in study This directed at three dimensions important . First , the aspect planning and implementation method teaching by PJOK teachers, which includes how teachers design activities , preparing media and strategies, and carry out learning based game traditional in a way real in field . Second , response student to method teaching which includes perception , enthusiasm , and level involvement student during the learning process ongoing . Third , research This Also study in a way deep factors supporters and inhibitor in implementation method this , okay from internal side (teacher readiness , motivation students) and external (support) school , conditions environment Study).

Through approach qualitative descriptive , all data obtained analyzed For describe phenomenon in a way holistic , not only For answer formulation problems , but also for explore potential learning based culture local in increase effectiveness education physical in a way contextual and meaningful .

1. Description Planning Learning by Teacher Physical Education

The PJOK teacher demonstrates initiative innovative pedagogical with compile planning learning Which integrate game traditional *enjang - enjang* to in document Plan Implementation Learning (RPP). Integration This No done in a way haphazard , but through process alignment between characteristics game local with achievements learning Physical Education Which arranged in curriculum national approach This chosen as effort For create atmosphere learn more fun , contextual , and at the same time loaded with values education character .

Objective learning Which formulated Teacher No solely emphasize in development aspect skills motor like balance , agility , and coordination body , but Also covers dimensions affective And social , like sportsmanship , Workequality , honesty , and responsibility answer . This is show that the teacher positions PJOK not only as means exercise physical , but also as a medium for internalization values important positives in life social participant educate .

In designing activities , teachers compile stages learning in a way systematic and appropriate with principle PJOK learning , namely covers session warmup , core activities in the form of game *jang-engjang* , and session cooling . Every stage designed so that support development physique And social student in a way gradually and structured . Learning location chosen in a way strategic , namely in the field school open , which allows student move free and interactive in a way active without obstacle physique .

More carry on , Teacher do adaptation to form And rule game *longan* so that in harmony with level development participant education . Adjustment This covers variations ,

system turn , as well as evaluation performance Which more nature reflective . With Thus , the method learning used No only maintain mark traditional games , but Also enrich experience Study student in context education physical based culture local .

2. Description Implementation Learning

Implementation Physical Education learning is underway in dynamic , participatory and conducive atmosphere for growth involvement active students . Based on results observation directly in the field , the PJOK teacher carries out role as communicative facilitator And responsive . He start activity with explanation rule game longan in a way coherent and easy understood by all students , continued with demonstration practice Which show technique basic and provision games .

After that , the teacher divided student to in groups small in a way fair , for create atmosphere collaborative learning at a time competitive in a way healthy . During the activity in progress , the teacher shows involvement active with method observe , guiding , And give correct light to attitude and technique play students . Not only focus on aspects skills physical , the teacher also inserts strengthening values character like honesty , work the same , and responsibility the answer given through session reflection together at the end activity .

Response student to learning show very strong tendency positive . They looks enthusiastic , enthusiastic , And each other support One each other in games . In atmosphere Which competitive And pleasant This , student still show attitude sportsmanship , such as accept defeat with broad- minded and giving Spirit to Friend One team. This is reflect success method teaching in implant values social and emotional through activity physique .

3. Description Response Student

Based on results interview deep with students who become informant in study this , obtained description that majority student respond positive and enthusiastic to use method physical education- based learning game traditional *enjang-enjang* . Para student state that activity learning become more fun , no boring , and capable increase Spirit they For involved active during lesson ongoing . Wrong One student disclose that “ usually PJOK lessons feel normal only , but if use game like this So exciting and want Keep going follow .”

Game *longan* assessed give experience Study which are more meaningful Because combine element entertainment with activity physically challenging . Besides make student move in a way active , game This also train concentration , coordination body , as well as Work The same in group . Student feel sued For focus and at the same time Study value turn as well as honor rules of the game that have been agreed . This is show that game No only impact on aspect motor but Also touch realm affective , social And emotional student .

A number of student even mention that method learning This Far more interesting and not monoton If compared to with conventional PJOK learning models Which only focus on theory or activity repetitive like run , push-ups, or sit-ups. According to they , even though game seen simple , but challenges that arise in game precisely spur passion and creation atmosphere healthy competition between Friend classmates .

More continue , students convey that they more easy understand and remember material PJOK when practiced in form game Because the atmosphere more interactive and fun . Games help create atmosphere living learning , strengthening connection between friends , and make PJOK lessons become long -awaited moment . Response This show that approach based game traditional own potential strong in increase motivation learn and create experience education positive and contextual physical for student .

4. Factor Supporters And Inhibitor

a. Factor Supporters

In implementation learning Physical Education based game traditional *longan-longan* , found a number of factor supporters Which participate strengthen success method this . One of factor main is support from party schools , especially in provision facility

learning like a field area wide and sufficient open space representative For implementation game traditional .

Besides that , enthusiasm tall students to game traditional also becomes capital important in create atmosphere learning Which active and fun . Student show interest Which strong Because game This No only entertain , but Also give challenge Which in accordance with character teenager . Interest to game local This participate make it easier Teacher in build proximity emotional And participation student in activity learning . Supporting factors other is readiness of PJOK teachers in design and implement learning , Good from aspect planning Lesson Plan, mastery material , as well as skills modify game *longan* so that in accordance with curriculum And characteristics participant educate . Teacher capable facilitate learning with approach communicative And adaptive to condition class.

b. Factor Inhibitor

Study this also identifies a number of factor inhibitor which influences smoothness implementation method This is the most dominant external factor. is condition unpredictable weather certain , especially moment season rain . Because PJOK learning is carried out in the classroom open , then Rain can cause cancellation or diversion activities , so that No all plan learning can realized in a way optimal. Besides That , Still there is a number of students who have not fully understand rule game traditional , good Because Not yet Once play previously and Because difference background behind experience play . This is sometimes need time addition For explanation or demonstration repeat Which can reduce duration time practice in a way direct .

Inhibiting factors other is limitations allocation time physical education learning Which only ongoing a number of O'clock in a week . Matter This make Teacher must adapt duration game with available time , including streamline the heating , implementation and reflection processes in One meeting . Although Thus , the teacher tries overcome constraint the with alternative strategies like do simulation game in room closed , giving visual explanation using images /videos , and modify time and rules game to stay effective although in condition limited .

1. Compliance Planning and Implementation with Principle Learning

Findings show that the teacher designs learning in a way systematic start from preparation of lesson plans, selection of game media to strategy implementation in field . Matter This reflect implementation principle learning active where students No only become recipient material but involved in a way direct in the learning process through activity enjoyable and meaningful physical activity .

2. Improvement Motivation And Involvement Student

Student convey that method game make they more Spirit And No bored as well as want to Keep going follow lesson PJOK. Besides that , the game *longan* give realistic challenges and opportunities For Work in group so that increase interaction social and trust self student .

3. Planting Mark Character through Game Traditional

Game *longan* No only form skills motor , but Also in a way experience implant values character like sportsmanship , Work The same , discipline , And not quite enough answer . Student Study value rule , accept defeat as well as support Friend One group .

4. Role Factor Supporters and Obstacle

Success implementation method teaching this is also influenced by a number of factor supporters , such as : Support from school , Teacher readiness in designing learning and enthusiasm student to game . However , there are also obstacles , such as : Dependence on the weather For learning in outside room , Time learning Which limited And Still existence students who have not understand with rule games .

5. Relevance to Curriculum And Wisdom Local

Implementation game *longan* as part from PJOK learning shows relevance strong with Independent Curriculum , which encourages learning based culture local , contextual , and formation - oriented Profile Pancasila Students . Games this also becomes form preservation enriching culture identity student as part from diverse Indonesian society .

Conclusion

Based on the results of data analysis and discussion, this study produced several important conclusions regarding the implementation of physical education teaching methods based on the traditional Longan game. First, the use of the Longan game as a teaching method has proven effective in increasing students' motivation, active participation, and character formation. The learning process occurs in a fun and participatory atmosphere, where students not only develop motoric skills but also internalize essential values such as sportsmanship, cooperation, discipline, and responsibility (Sari & Suharjo, 2018; Gil-Arias et al., 2017). The combination of physical activity and value-based learning creates a holistic educational experience that contributes to students' overall development.

Second, PJOK teachers were observed to conduct the planning and implementation of learning systematically, in accordance with the principles of active and student-centered learning. This demonstrates that teachers are capable of designing learning activities that are both engaging and educationally meaningful, aligning with national curriculum standards and the Independent Curriculum framework (Ministry of Education, Culture, Research and Technology, 2022; Hastie et al., 2011).

Third, the study identified several factors that support the successful implementation of this method, including school support, student enthusiasm, teacher readiness, and creativity. Conversely, challenges such as weather conditions, limited time, and uneven student understanding of game rules were also observed, which teachers managed through adaptive strategies (Afifah et al., 2025; Rumaeso et al., 2024).

Finally, the Longan game is not only physically relevant but also carries educational and cultural significance, highlighting the integration of local wisdom into PJOK learning. This approach supports the development of Pancasila Student Profiles and demonstrates the potential of traditional games to strengthen cultural awareness while achieving educational objectives (Lavega-Burgués et al., 2014; Méndez-Giménez et al., 2015).

References

1. Afifah, H. M., Maheswari, D. S., & Primaningsih, K. (2025). The simple and traditional game-based health education model to promote healthy lifestyles in elementary school students: A literature review. *Journal of Public Health and Education*, 12(1), 1–15. <https://doi.org/10.15294/jpehs.v12i1.29139>
2. Anggraini, D. R. (2025). Utilization of game-based learning media in enhancing students' interest in Physical Education. *Journal of Student Research*, 6(1), 23–34. <https://doi.org/10.51178/jsr.v6i1.2376>
3. Bessa, C., Hastie, P., Araújo, R., & Mesquita, I. (2019). What do we know about the development of personal and social skills within sport education model: A systematic review. *Journal of Sports Science & Medicine*, 18(4), 812–829. <https://doi.org/10.52082/jssm.2019.812>
4. Casey, A., & Goodyear, V. A. (2015). Can cooperative learning achieve the four learning outcomes of physical education? A review of literature. *Quest*, 67(1), 56–72. <https://doi.org/10.1080/00336297.2014.984733>
5. Dyson, B., Griffin, L. L., & Hastie, P. (2004). Sport education, tactical games, and cooperative learning: Theoretical and pedagogical considerations. *Quest*, 56(2), 226–240.

- <https://doi.org/10.1080/00336297.2004.10491823>
6. Fernández-Río, J., Sanz, N., Fernández-Cando, J., & Santos, L. (2017). Impact of a sustained cooperative learning intervention on student motivation in physical education. *Physical Education and Sport Pedagogy*, 22(1), 89–105. <https://doi.org/10.1080/17408989.2015.1123238>
 7. Gil-Arias, A., Harvey, S., García-Herreros, F., González-Víllora, S., & Práxedes, A. (2017). Effect of a hybrid teaching games for understanding/sport education unit on elementary students' decision-making and skill execution. *PLOS ONE*, 12(3), e0174394. <https://doi.org/10.1371/journal.pone.0174394>
 8. Dese, D. C., Wibowo, C., Widyaningtyas, R., & Nopiyanto, Y. E. (2025). Game-based learning to enhance motivation and fundamental motor skills in elementary physical education: A quasi-experimental study. *Edu Sportivo: Indonesian Journal of Physical Education*, 6(3), 260–273. [https://doi.org/0.25299/esijope.2025.vol6\(3\).25032](https://doi.org/0.25299/esijope.2025.vol6(3).25032)
 9. Prayogi, S., Mayzufi Firdiansyah, H., Achson Aljaohari, Z., Wibowo, S., & Yuan Prambudi, D. (2024). Peningkatan kebugaran jasmani melalui permainan tradisional pada mata pelajaran PJOK. *Jurnal Porkes*, 7(2), 770–781. <https://doi.org/10.29408/porkes.v7i2.26143>
 10. Restu Ilahi, B. (2025). Pengaruh permainan tradisional Hadang terhadap tingkat kebugaran jasmani siswa SD Negeri 72 Kota Bengkulu. *Dharmas Education Journal*, 4(1), 1–10. <https://doi.org/10.56667/dejournal.v4i1.906>
 11. Rumaeso, I., Suherman, A., & Rukmana, A. (2024). The impact of traditional games on students' cooperation ability in physical education. *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, 9(2), 1–12. <https://doi.org/10.33369/jk.v9i2.40492>
 12. Suryadi, D., Ivanov, D., & Zulfadila, Z. (2025). Stimulation of physical fitness through traditional games in elementary school students: A systematic review in Indonesia. *Journal of Applied Movement and Sport Science*, 1(3), 12–19. <https://doi.org/10.65575/jamss.v1i3.92>
 13. Velawati, M. V. (2020). Pelaksanaan pembelajaran permainan tradisional dalam pendidikan jasmani di sekolah dasar se Kecamatan Ketanggungan, Brebes. *Indonesian Journal for Physical Education and Sport*, 1(1), 1–9. <https://doi.org/10.15294/inapes.v1i1.39073>
 14. Wiyarko, W., & Adhi, B. P. (2025). Enhancing physical education learning outcomes through game based learning approach in primary schools. *Juwara: Jurnal Wawasan dan Aksara*, 5(1), 261–273. <https://doi.org/10.58740/juwara.v5i1.495>
 15. Wardhani, S. N., Nugraha, R., & Riansyah. (2025). The effect of game-based learning in physical education to improve social interaction and physical fitness. *JPEHS*, 12(2), 1–15. <https://doi.org/10.15294/jpehs.v12i2.39782>
 16. Sudarwo, R., Kurniawan, E., Irmansyah, J., Mujriah, M., & Esse, B. R. (2023). The effectiveness of Lombok traditional games on increasing physical literacy of elementary school students. *Jurnal Keolahraaan*, 11(1), 95–103. <https://doi.org/10.21831/jk.v11i1.58316>
 17. Retos traditional games research. (2025). Developing a traditional game-based physical education learning model to improve students' physical fitness. *Retos*, 62, 787–795. <https://doi.org/10.47197/retos.v61.107121>
 18. Nevitaningrum, N., Mulyatno, C. B., & Nopembri, S. (2023). Implementasi pembelajaran pendidikan jasmani berbasis permainan tradisional dalam membentuk karakter peserta didik sekolah dasar. *Jurnal Pendidikan Jasmani Indonesia*, 19(1), 1–10. <https://doi.org/10.21831/jppi.v19i1.73492>
 19. Wijaya, R. G., & Fitri, E. S. M. (2023). Traditional game based on e-learning method to improve the basic locomotor movements. *Jurnal Pendidikan Jasmani Indonesia*, 19(1), 1–12. <https://doi.org/10.21831/jppi.v19i1.73698>

20. Kurniawan, N., Priambodo, A., & Marsudianto. (2024). Upaya meningkatkan motivasi belajar siswa dalam pembelajaran PJOK melalui permainan tradisional Engklek. *PUSTAKA: Jurnal Bahasa dan Pendidikan*, 4(4), 148–156. <https://doi.org/10.56910/pustaka.v4i4.1729>
21. Hutomo, L., & Kurniawan, W. R. (2024). Peran permainan tradisional sebagai media belajar pendidikan jasmani dalam mengembangkan keterampilan sosial siswa SD. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(1), 1–10. <https://doi.org/10.23969/jp.v10i01.23723>
22. Nugraha, B. I., Sudarmanto, E., & Nurhidayat. (2024). Pengaruh permainan tradisional Bentengan terhadap kebugaran jasmani siswa SD. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(4), 1–10. <https://doi.org/10.23969/jp.v10i04.37103>
23. Afifah, H. M. (2025). Traditional games as a tool for improving psychosocial development: A comparative study of structured vs progressive learning models. *Edu Sportivo*, 6(1), 1–14. [https://doi.org/10.25299/esijoje.2025.vol6\(1\).18538](https://doi.org/10.25299/esijoje.2025.vol6(1).18538)
24. Satria, M. H., Aliriad, H., Nuzulia, D., Mangngassai, I. A. M., Junaidi, I. A., & Zainuddin, M. (2024). Game-based physical education learning to improve basic manipulative movement skills in primary school children. *Edelweiss Applied Science and Technology*, 8(6), 8117–8125. <https://doi.org/10.55214/25768484.v8i6.3756>
25. Camacho-Sánchez, R., Manzano-León, A., Rodríguez-Ferrer, J. M., Serna, J., & Lavega-Burgués, P. (2023). Game-based learning and gamification in physical education: A systematic review. *Education Sciences*, 13(2), 183. <https://doi.org/10.3390/educsci13020183>